

APPENDIX M - METRIC CONVERSIONS

*This appendix provides formulas to convert
U.S. Customary Units to International System (Metric) Units*

With the adoption by the United States of the Harmonized Tariff Schedule (HTS) and its use of metric units, there will be a natural shift to report quantities on invoices in metric units. Where a need to convert exists, the following metric conversion factors should be used. These factors have been taken from the Federal Standard 376A, a Government-wide standard developed through the Government's Interagency Committee on Metric Policy.

The following chart provides the multiplier to be used in converting from U.S. Customary units to Metric units. *Where there is a need to convert from Metric units to U.S. Customary units divide rather than multiply by the factor.*

Metric Conversion Chart - Approximations

Quantity	When You Know	To Find Metric Units	Multiply By
Mass	Ton (Long)	T (Metric Ton) (1T = 1,000 kg)	1.016047
	Ton (Short)	T (Metric Ton)	0.90718474
	Lb (Avdo)	Kg	0.45359237
	Oz (Troy)	G	31.10348
Length	Yd	M	0.9144
	Ft	M	0.3048
	In	Cm	2.54
	In	Mm	25.4
Area	Yd ²	M ²	0.8361274
	Ft ²	M ²	0.09290304
	In ²	Cm ²	6.4516
	In ²	Mm ²	645
Volume	Yd ³	M ³	0.7645549
	Bbl (oil)	M ³	0.1589873
	(42 Gallons)		0.02831685
	Ft ³	M ³	
	Ft ³	L	28.31685
	Gal (Liq)	L	3.785412
	Quart (Liq)	L	0.9463529
	Pint (Liq)	L	0.4731765
	Fl Oz	MI	29.57353
	In ³	Cm ³	

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Metric Conversion Chart - Approximations (Continued)

Quantity	When You Know	To Find Metric Units	Multiply By
Frequency	C/S (Formerly Cos. Cycles Per Second)	Hz	1.0
Force	Kip	kN	4.448222
Radioactivity	Curie	MBq (Bq-becquerel)	37000
Stress	Lbl/In ² (formerly PSI)	MPa	0.006894757
	Lbl/In ² (formerly PSI)	KPa	6.894757
Power	Btu/S	kW	1.055056
	hp (electric)	kW	0.746
	Btu/H	W	0.2930711
Celsius	EF	EC	tEC = (tE f 32)/1.8

Note: The following conversion procedure should be followed for beverages, spirits and vinegar classified in Chapter 22 of the *Harmonized Tariff Schedule of the United States Annotated* (HTS):

Multiply the number of proof-liters by 0.264172 to obtain proof-gallons at 15.5EC (60F). For wine, multiply the number of proof-liters by 0.26417. This allows for the calculation of the U.S. excise tax.